



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,131	04/21/2004	James Chieh-Tsung Chen	MP0506	5418
26703 7590 04/01/2008 HARNESS, DICKEY & PIERCE P.L.C. 5445 CORPORATE DRIVE SUITE 200 TROY, MI 48098				
EXAMINER				
VIANA DI PRISCO, GERMAN				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
04/01/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/829,131

**Applicant(s)**

CHEN ET AL.

**Examiner**

GERMAN VIANA DI PRISCO

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 06/12/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This Action is in response to Applicant's amendment filed on August 2, 2007. **Claims 1-54** are still pending in the present application. **This Action is made FINAL.**

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on June 12, 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 6, 10, 17, 19, 21-23, 28, 30, 33, 44, 46, 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauchot et al. (US Patent Number 5,644,576).

Regarding claim 1, Bauchot et al. discloses a wireless network device for communicating with a network ((indoor radio system), column 4, lines 52-53, figure 1) comprising: a memory to store an image comprising a plurality of virtual machines (application programs, figure 1, 72) and only one multi-tasking operating system (figure 2, 70), wherein each of the virtual machines comprises a wireless network application to execute on the multi-tasking operating system (column 5, lines 65-67); a

processor to execute the virtual machines (microprocessor system, figure 2, 56, column 5, lines 35-37) ;  
and a port comprising

a physical-layer device to communicate with the network (transceiver adapter, figure 1A, 38 or 44;  
column 5, lines 29-31 ), and a media access controller (wireless network controller, figure 1, 18) to  
communicate with the physical-layer device and the processor.

Regarding claims 3,19,30 and 46, Bauchot et al. discloses everything claimed as applied (see  
claims 1,17,28,44). In addition Bauchot et al. discloses that the memory  
comprises a non-volatile memory (Program storage, figure 2, 66), further comprising: volatile memory  
(data storage, figure 2, 68); and memory controller (direct memory access (DMA) controller, column 5,  
line 50) for creating a copy of the image from the non-volatile memory to the volatile memory (column  
5, lines 47-51); wherein the processor executes the virtual machines from the volatile memory (column  
5, lines 47-51).

Regarding claims 6 and 33, Bauchot et al. discloses everything claimed as applied (see claims 1  
and 28). In addition, Bauchot et al. discloses that the image further comprises:  
a plurality of virtual machine device drivers to communicate with the virtual machines (column 6, lines  
1-5); and a media access controller device driver to communicate with the virtual machine device  
drivers and the media access controller (column 6, lines 1-5).

Regarding claim 10, Bauchot et al. discloses a method for a wireless network device for communicating  
with a network ((indoor radio system), column 4, lines 52-53, figure 1) comprising: storing an image  
comprising a plurality of virtual machines and only one multi-tasking operating system, wherein each  
of the virtual machines comprises a wireless network application to execute on the multi-tasking  
operating system (column 5, lines 65-67); and

executing the virtual machines (microprocessor system, figure 2, 56, column 5, lines 35-37).

Regarding claim 17, Bauchot et al. discloses a wireless network device for communicating with a network ((indoor radio system), column 4, lines 52-53, figure 1) comprising: a memory to store an image comprising a plurality of virtual machines (application programs, figure 1, 72) and only one multi-tasking operating system (figure 2, 70), wherein each of the virtual machines comprises a wireless network application to execute on the multi-tasking operating system; a processor to execute the virtual machines (column 5, lines 65-67); and a bus to communicate with the processor and the network (figure 2, 52).

Regarding claims 21 and 48, Bauchot et al. discloses everything claimed as applied (see claims 17 and 44). In addition, Bauchot et al. discloses that the image further comprises: a plurality of virtual machine device drivers to communicate with the virtual machines (column 6, lines 1-5); and a bus interface driver to communicate with the virtual machine device drivers and the bus (column 6, lines 5-6).

Regarding claims 22 and 49, Bauchot et al. discloses a physical-layer device to communicate with the network(transceiver adapter, figure 1A, 38 or 44; column 5, lines 29-31) and a media access controller (wireless network controller, figure 1, 18) to communicate with the physical-layer device and the bus.

Regarding claims 23 and 50, Bauchot et al. discloses everything claimed as applied above (see claims 22 and 49). In addition, Bauchot et al discloses a plurality of virtual machine device drivers to communicate with the virtual machines (column 6, lines 1-5); a first bus interface driver to communicate with the virtual machine device drivers and the bus (column 6, lines 5-6); a second bus interface driver to communicate with the bus (figure 2, 52); and a media

access controller device driver to communicate with the second bus interface driver and the media access controller (column 6, lines 1-5).

Regarding claim 28, Bauchot et al. discloses a wireless network device for communicating with a network ((indoor radio system), column 4, lines 52-53, figure 1) comprising: memory means for storing an image comprising a plurality of virtual machines (application programs, figure 1, 72) and only one multi-tasking operating system (figure 2, 70), wherein each of the virtual machines comprises a wireless network application to execute on the multi-tasking operating system (column 5, lines 65-67); processing means for executing the virtual machines (microprocessor system, figure 2, 56, column 5, lines 35-37); and port means comprising physical-layer means for communicating with the network (transceiver adapter, figure 1A, 38or44; column 5, lines 29-31), and media access control means (wireless network controller, figure 1, 18) for communicate with the physical-layer means and the processing means.

Regarding claim 44, Bauchot et al. discloses wireless network device for communicating with a network comprising: memory means for storing an image comprising a plurality of virtual machines (application programs, figure 1, 72) and only one multi-tasking operating system (figure 2, 70), wherein each of the virtual machines comprises a wireless network application to execute on the multi-tasking operating system; processing means for executing the virtual machines (column 5, lines 65-67); and bus means for communicating with the processing means and the network (figure2, 52).

4. Claims 37 and 39-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Meredith et al. (Patent Application Publication US 2003/0212761 A1).

Regarding claim 37, Meredith et al. discloses a computer program embodying

instructions executable by a computer for a wireless network device for communicating with a network (paragraph 37, lines 17-27) comprising: storing an image comprising a plurality of virtual machines (application programs, figure 2, 235) and only one multi-tasking operating system (figure 2, 234), wherein each of the virtual machines comprises a wireless network application to execute on the multi-tasking operating system (figure 1,102); and executing the virtual machines (figure 2,220).

Regarding claim 39, Meredith et al. discloses everything claimed as applied above (see claim 37). In addition, Meredith et al. discloses copying the image from the non-volatile memory to a volatile memory (paragraph 39); and wherein the virtual machines are executed from the volatile memory (paragraph 39).

Regarding claim 40, Meredith et al. discloses everything claimed as applied above (see claim 37). In addition, Meredith et al. discloses creating in the volatile memory a virtual machine queue (figure 3B, 302C3) for each virtual machine and a processor queue for a processor (figure 3B, 310); storing in the processor queue data to be processed for the virtual machine being executed (paragraph 48, lines 1-3); creating a copy in the respective virtual machine queue of the data in the processor queue when the respective virtual machine is executing (paragraph 48, lines 20-26); and wherein when one of the virtual machines resumes executing after another of the virtual machines was executing, copying the data from the respective virtual machine queue to the processor queue (paragraph 48, lines 6-10).

Regarding claim 41, Meredith et al. discloses everything claimed as applied above (see claim 37). In addition, Meredith et al. discloses a wireless network client (figure

Art Unit: 2617

1,102).

Regarding claim 42, Meredith et al. discloses everything claimed as applied above (see claim 37). In addition, Meredith et al. discloses computer program executing selected ones of the virtual machines in accordance with an input (paragraph 40, lines 14-19).

Regarding claim 43, Meredith et al discloses everything claimed as applied above (see claim 37). In addition, Meredith et al. discloses the processor executes a plurality of the virtual machines concurrently (paragraph 51 ).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various



claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 11, 18, 29, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauchot et al. (US Patent Number 5,644,576)

Regarding claims 2, 11 and 29, Bauchot et al. discloses everything claimed as applied above (see claims 1, 10 and 28). However, Bauchot et al. fails to particularly disclose IEEE standards 802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n. Nevertheless, Bauchot et al. discloses that the network is LAN (figure 1A, 24, column 4, lines 55-60). It is conventional in the art that for the use of LAN the standard is IEEE standards 802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use IEEE standards 802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n, because it is suggested by Bauchot et al.

Regarding claims 18 and 45, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose IEEE standards 802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n.

Nevertheless, Bauchot et al. discloses that the network is LAN (figure 1A, 24, column 4, lines 55-60). It is conventional in the art that for the use of LAN the standard is IEEE standards

802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use IEEE standards 802.11, 802.11 a, 802.11 b, 802.11g and 802.11 n, because it is suggested by Bauchot et al.

9. Claims 4-5, 7, 8, 12-16, 20, 24, 25-26, 31-32, 34-35, 47, 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauchot et al. (US Patent Number 5,644,576) in view of Meredith et al. (Patent Application Publication US 2003/01212761 A1).

Regarding claims 4 and 31, Bauchot et al. discloses everything claimed as applied above (see claims 1 and 28). However, Bauchot et al. fails to particularly disclose a virtual machine queue element and processor queue element as claimed.

Meredith et al. discloses that the memory comprises a virtual machine queue (figure 3B, 302C3) for each virtual machine and a processor queue for the processor (figure 3B, 310); wherein the processor stores data to be processed for the virtual machine being executed by the processor in the processor queue (paragraph 48, lines 1-3); wherein each virtual machine creates a copy in the respective virtual machine queue of the data in the processor queue when the processor is executing the respective virtual machine (paragraph 48, lines 20-26); and wherein when the processor resumes executing one of the virtual machines after executing another of the virtual machines, the one of the virtual machines copies the data from the respective virtual machine queue to the processor queue (paragraph 48, lines 6-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a virtual machine and processor

queue as taught by Meredith et al. because information would be transferred as at a faster and more efficient rate.

Regarding claims 5,14 and 32, Bauchot et al. discloses everything claimed as applied above (see claims 1,10 and 28). However, Bauchot et al. fails to particularly disclose a wireless network application.

Meredith et al. discloses a wireless network client (figure 1,102).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a wireless network client as taught by Meredith et al. because the wireless network client allows faster access to information.

Regarding claims 7 and 34, Bauchot et al. discloses everything claimed as applied above (see claims 1 and 28). However, Bauchot et al. fails to particularly disclose an input means or device.

Meredith et al. discloses an input device to select one or more of the virtual machines (paragraph 40, lines 14-19); wherein the processor executes the virtual machines selected by the input device (paragraph 40, lines 19-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a input device or means as taught by Meredith et al. because an input device or means will allow invention to be more customer friendly and easier to use.

Regarding claims 8,16 and 35, Bauchot et al. discloses everything claimed as applied above (see claims 1,10 and 28). However, Bauchot et al. fails to particularly disclose simultaneous execution of virtual machines.

Meredith et al. discloses the processor executes a plurality of the virtual machines concurrently (paragraph 51).

Therefore, it would have been obvious by one of ordinary skill in the art at the time the invention was made to allow Bauchot et al.'s invention to execute the virtual machines simultaneously as taught by Meredith et al. because it provides user with more flexibility.

Regarding claim 12, Bauchot et al. discloses everything claimed as applied above (see claim 10). However, Bauchot et al. fails to specifically disclose virtual machines executed from volatile memory.

Meredith et al. discloses copying the image from the non-volatile memory to a volatile memory (paragraph 39); and wherein the virtual machines are executed from the volatile memory (paragraph 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow Bauchot et al.'s invention to store and execute from volatile memory because the data is more secure in volatile memory.

Regarding claim 13, Bauchot et al. discloses everything claimed as applied above (see claim 10). However, Bauchot et al. fails to disclose a virtual machine queue element and a processor queue element as claimed.

Meredith et al. discloses creating in the volatile memory a virtual machine queue (figure 3B, 302C3) for each virtual machine and a processor queue for a processor (figure 3B, 310); storing in the processor queue data to be processed for the virtual machine being executed (paragraph 48, lines 1-3); creating a copy in the respective virtual machine queue of the data in the processor queue when the respective virtual machine is executing (paragraph 48, lines 20-

26); and wherein when one of the virtual machines resumes executing after another of the virtual machines was executing, copying the data from the respective virtual machine queue to the processor queue (paragraph 48, lines 6-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a virtual machine and processor queue as taught by Meredith et al. because information would be transferred at a faster and more efficient rate.

Regarding claim 15, Bauchot et al. discloses everything claimed as applied above (see claim 10). However, Bauchot et al. fails to specifically disclose execution of selected virtual machines.

Meredith et al. discloses a computer program executing selected ones of the virtual machines in accordance with an input (paragraph 40, lines 14-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention a input device or means as taught by Meredith et al. because an input device or means will allow invention to be more customer friendly and easier to use.

Regarding claims 20 and 47, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose a virtual machine queue element and a processor queue element as claimed.

Meredith et al. discloses that the memory comprises a virtual machine queue (figure 3B, 302C3) for each virtual machine and a processor queue for the processor (figure 3B, 310); wherein the processor stores data to be processed for the virtual machine being executed

by the processor in the processor queue (paragraph 48, lines 1-3); wherein each virtual machine creates a copy in the respective virtual machine queue of the data in the processor queue when the processor is executing the respective virtual machine (paragraph 48, lines 20-26); and wherein when the processor resumes executing one of the virtual machines after executing another of the virtual machines, the one of the virtual machines copies the data from the respective virtual machine queue to the processor queue (paragraph 48, lines 6-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a virtual machine and processor queue as taught by Meredith et al. because information would be transferred at a faster and more efficient rate.

Regarding claims 24 and 51, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose a wireless network application.

Meredith et al. discloses a wireless network client (figure 1,102).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a wireless network client as taught by Meredith et al. because the wireless network client allows faster access to information.

Regarding claims 25 and 52, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose an input means or device.

Meredith et al. discloses an input device to select one or more of the virtual machines (paragraph 40, lines 14-19); wherein the processor executes the virtual machines selected by the

input device (paragraph 40, lines 19-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a input device or means as taught by Meredith et al. because an input device or means will allow invention to be more customer friendly and easier to use.

Regarding claims 26 and 53, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose simultaneous execution of virtual machines.

Meredith et al. discloses the processor executes a plurality of the virtual machines concurrently (paragraph 51).

Therefore, it would have been obvious by one of ordinary skill in the art at the time the invention was made to allow Bauchot et al.'s invention to execute the virtual machines simultaneously as taught by Meredith et al. because it provides user with more flexibility.

10. Claims 9, 27, 36 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauchot et al. (US Patent Number 5,644,576) in view of Shuen (US Patent Number 5,572,528).

Regarding claims 9 and 36, Bauchot et al. discloses everything claimed as applied above (see claims 1 and 28). However, Bauchot et al. fails to particularly disclose a wireless network access point virtual machine and a wireless network client virtual machine.

Shuen discloses a wireless network access point virtual machine (figure 1,312) and a wireless network client virtual machine (figure 1,330); wherein the processor executes the wireless network access point virtual machine and the wireless network client virtual machine

concurrently; wherein the wireless network client virtual machine comprises a first virtual wireless port to communicate with the port (figure 1,309A, column 12, lines 30-32), and a first virtual bridge to communicate with the first virtual wireless port (router, figure 1,342); and wherein the wireless network access point virtual machine comprises a second virtual wireless port to communicate with the port (figure 1, 309B, column 12, lines 30-32) a virtual distribution service port to communicate with the first virtual bridge (WAN link, figure 1,324,304), and a second virtual bridge to communicate with the second virtual wireless port and the virtual distribution service port (router, figure 1,342).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a wireless network access point virtual machine and a wireless network client virtual machine as taught by Shuen because those elements provide faster and more efficient service.

Regarding claims 27 and 54, Bauchot et al. discloses everything claimed as applied above (see claims 17 and 44). However, Bauchot et al. fails to particularly disclose a wireless network access point virtual machine and a wireless network client virtual machine.

Shuen discloses a wireless network access point virtual machine (figure 1,312) and a wireless network client virtual machine (figure 1,330); wherein the processor executes the wireless network access point virtual machine and the wireless network client virtual machine concurrently; wherein the wireless network client virtual machine comprises a first virtual wireless port to communicate with the bus (figure 1,309A, column 12, lines 30-32), and a first virtual bridge to communicate with the first virtual wireless port (router, figure 1,342); and wherein the wireless network access point virtual machine comprises a second virtual wireless



port to communicate with the bus (figure 1,309B, column 12, lines 30-32) a virtual distribution service port to communicate with the first virtual bridge (WAN link, figure 1,324,304), and a second virtual bridge to communicate with the second virtual wireless port and the virtual distribution service port (router, figure 1,342).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Bauchot et al.'s invention with a wireless network access point virtual machine and a wireless network client virtual machine as taught by Shuen because those elements provide faster and more efficient service.

11 . Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (Patent Application Publication US 2003/01212761 A1).

Regarding claim 38, Meredith et al. discloses everything claimed as applied above (see claim 37). However, Meredith et al. fails to particularly disclose IEEE standards 802.11,802.11 a, 802.11 b, 802.11g and 802.11 n.

Nevertheless, Meredith et al. discloses that the network is LAN (paragraph 41, lines 10-17). It is conventional in the art that for the use of LAN the standard is IEEE standards 802.11,802.11 a, 802.11 b, 802.11g and 802.11 n.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use IEEE standards 802.11,802.11 a, 802.11 b, 802.11g and 802.11 n, because it is suggested by Meredith et al.

***Response to Arguments***

12. Applicants' arguments filed on 08/02/2007 have been fully considered but they are not persuasive.

With respect to claim 1, the Applicants' basically argue that the applications programs disclosed by Bauchot are not virtual machines. The Examiner respectfully disagrees with the Applicants' argument because as disclosed in paragraph [0023] of the Applicants' specification, a virtual machine is a software architectural block that allows multiple applications to share one hardware element, such as a wireless port. Bauchot discloses one or more application programs 72 (software) which may include a communications manager 74 that controls a transceiver 36 ( a shared hardware element) (see col. 5, line 65 – col.6, line 7).

With respect to claim 37, the Applicants' basically argue that Meredith uses virtual machines in various process kernels (302C, 304C), but these kernels do not include wireless network applications. The Examiner respectfully disagrees with the Applicants' argument because process kernels (302C, 304C) represent an application program (Web service) that allows access to the hardware in the wireless device (PDA 302, cellular phone 334) (see paragraph [0044]).

With respect to claim 4, the Applicants' basically argue that the queues of Meredith do not appear to copy data from a processor. The Examiner respectfully disagrees with the Applicants' argument because in paragraph [0048] of Meredith it is disclosed that processes 302B and 304B write and read messages (data) from queue 310. It is implicit that the writing and reading is executed by the processor 220.

***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERMAN VIANA DI PRISCO whose telephone number is

(571)270-1781. The examiner can normally be reached on Monday through Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/German Viana Di Prisco/  
Examiner, Art Unit 2617  
March 26, 2008

/Rafael Pérez-Gutiérrez/  
Supervisory Patent Examiner, Art Unit 2617